

2003-0694.02

HIGH RESOLUTION INK JET PRINthead

ABSTRACT OF THE DISCLOSURE

. A high resolution printhead for an ink jet printer. The printhead includes a semiconductor substrate containing at least one ink feed edge and a plurality of ink ejection actuators spaced a distance from the ink feed edge. Each of the ink ejection actuators has an aspect ratio ranging from about 1.5:1 to about 6:1. A nozzle plate is attached to the semiconductor substrate. The nozzle plate contains a plurality of nozzle holes, ink chambers and ink channels laser ablated in the nozzle plate corresponding to the plurality of ink ejection actuators. Adjacent nozzle holes are spaced apart with a pitch ranging from about 600 to about 1200 dpi. The distance from the ink feed edge is substantially the same for each of the ink ejection actuators.

C:\Draft\Patent Appln\58859US2nddraft.doc